[VALVE FOR CONTROL OF ADDITIONAL AIR FOR A TWO-STROKE ENGINE]

Abstract of Disclosure

Flange assembly for supporting a structure that provides scavenging air supply to an internal combustion engine at the carburetor to the engine. The assembly includes a thin-body flange that is configured to be abuttingly installed upon an end surface of the carburetor. The carburetor has its combustion air intake or port exposed at an outer surface for intaking air for the combustion process. The thin construction of the flange enables advantageous positioning of the adaptive flange. The relative dimensioning of the thin-body flange also contributes to its low-impact as a modification to air inlet arrangement. A combustion air aperture is provided that extends through the thin-body flange. The combustion air aperture is located in the flange for alignment with the combustion air intake. By this alignment, fluid communication is established across the flange and into the carburetor when the flange is abuttingly installed upon the carburetor. A scavenging air aperture also extends through the thin-body flange and is spaced apart from the combustion air aperture. A valve assembly is operatively coupled to the thin-body flange and has a valve element positioned at the scavenging air aperture for opening and closing the scavenging air aperture.

